

Supplementary File 1. Related to Figure 4.

Page 2 represents the expression level of all 25 measured proteins in human bone marrow CITE-seq experiment. Cells are projected into two dimensions using UMAP, and colored based on normalized antibody-derived tag (ADT) counts for each protein (range 10th-99th expression percentile for each protein).

Page 3 represents the predicted protein expression for all 25 proteins measured in the CITE-seq experiment in the Human Cell Atlas bone marrow dataset. Cells are projected into two dimensions using UMAP, and colored based on predicted normalized antibody-derived tag (ADT) counts for each protein (range 40th-99th expression percentile for each protein).

Page 4 represents the expression of celltype marker genes in HCA bone marrow cells. *AVP*: marker of hematopoietic stem cells (HSC). *LMO4*: basophil progenitor (Bas). *PF4*: megakaryocyte progenitor (MkP). *BLVRB*: erythroid progenitor (Er). *MME*: common lymphoid progenitor (CLp). *DERL3*: plasmacytoid dendritic cell (pDC). *CLEC9A*: conventional dendritic cell 1 (cDC1). *CD11*: conventional dendritic cell 2 (cDC2). *MPO*: granulocyte macrophage progenitor (GMP). *AZU1*: neutrophil progenitor (Neu). *CD14*: CD14+ monocyte (CD14 Mono). *FCGR3A*: CD16+ monocyte (CD16 Mono). *VREB3*: immature B cell (Immature B). *MS4A1*: mature B cell (Mature B). *CD79A*: immature / mature B cell (Immature/Mature B). *IGKC*: plasma cell (Plasma). *PF4*: megakaryocytes (Mk). *XCL1*: CD56+ natural killer cells (NK Bright). *CD8A*: CD8+ T cells (CD8 T). *CD4*: CD4+ T cells (CD4 T). *SH2D1A*: pre-T cell (pre-T). Cells are projected into two dimensions using UMAP, and colored based on normalized RNA counts for each gene (range 0-99th expression percentile for each gene).





